

MASAGUTOV, R.M.; BERG, G.A.; VARFOLOMEYEV, D.F.; SELIVANOV, T.I.;
RUGAY, Ye.A.; MUKHAMETOV, M.N.; KULINICH, G.M.; SOKOLOVA, V.I.;
KIRILLOV, T.S.

Hydrogenation of benzene on a nickel catalyst on kieselguhr.
Trudy BashNII NP no.7:127-133 '64. (MIRA 17:9)

MUKHAMETOV, N.Kh., master

Increasing the voltage rating of the Ts²⁰ current measuring tongs.
Energetik 9 no.8:18 Ag '61. (MIRA 14:8)
(Electric measurements)

ИВАНОВ, Р.М., 1953, 1954—(Илл.) "Data for the study of the morphology of artificial seeds." Ufa, 1953. 22 pp. (Bashkir State University Press, Ufa, Bashkiria, U.S.S.R.)

seeds." Ufa, 1953. 22 pp. (Bashkir State University Press, Ufa, Bashkiria, U.S.S.R.)

allusion to the fact that the seeds are not real (U, 26-52, 236)

MUKHAMETOV, R. Yu.

Occurrence of diphyllbothriasis among the population of
riverside areas of the Tatar A.S.S.R. Med. paraz. i paraz.
bol. 34 no.2:145-148 Mr-Apr '65. (MIRA 18:11)

1. Kafedra obshchey biologii Kazanskogo meditsinskogo
instituta.

MUKHAMETOV, Yu.G., burovoy master

Mechanization of all drilling processes is an urgent problem.
Neftianik 5 no. 12:13 D '60. (MIRA 13:12)

- 1. Nefteproizvodstvennoye upravleniye Tuzmazanefi'.
(Oil well drilling)**

MUKHAMETOVA, G. M.

Mukhametova, G. M. -- "Materials for the Study of Diseases of the Stomach among Workers Engaged in the Extraction and Processing of Petroleum." Bashkir State Med Inst imeni Fifteenth Anniversary of the All-Union Leninist Young Communist League, Ufa, 1955 (Dissertation for the Degree of Candidate of Veterinary Sciences)

SO: Knishnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

MUKHAMETOVA, G.M., kand.med.nauk; GABITOVA, R.F.

Clinical aspects and therapy of chronic poisoning with
sour crude oil products. Kaz.med. zhur. no.3:99-102
My-Je'63. (MIRA 16:9)

1. Ufimskiy nauchno-issledovatel'skoy institut gigiyeny
i professional'nykh zabolevaniy.
(PETROLEUM-TOXICOLOGY)

MUKHAMETCVA, G.M., kand. med.nauk, otv. red.; GELLER, L.I., kand.
med. nauk, red.; GINADEYEV, M.M., red.; MIKHAYLET'S, G.A.,
doktor med. nauk, red.; CHEVPETSOV, V.R., red.

[Industrial hygiene and health protection for the workers
of the petroleum and petrochemical industries] Gigiena
truda i okhrana zdorov'ia rabochikh v nef'tianoi i nefte-
khimicheskoi promyshlennosti. Ufa. Vol. 2. 1963. 547 p.
(MIRA 18:3)

1. Ufimskiy nauchno-issledovatel'skiy institut gigiyeny i
profzabolevaniy. 2. Direktor Ufimskogo nauchno-issledova-
tel'skogo instituta gigiyeny i profzabolevaniy (for Mukhame-
tova).

SULEYMANOV, B.V.; MUKHAMETRAKHIMOVA, R.F.

Treatment of typhoid fever with levomycetin and pentoxyl. Sov. med.
28 no.5:121-123 My '65. (MIRA 18:5)

1. Kafedra infektsionnykh bolezney Bashkirskogo meditsinskogo
instituta, Ufa.

MUKHAMETSHIN, N.; KURSEVICH, A.

In search of better procurement methods. Prom.koop. 14 no.8:
19 Ag '60. (MIRA 13:8)

1. Zamestitel' upravlyayushchego respublikanskoy kontoroy
"Vtorsyr'ye, "Kazan' (for Mukhametshin). 2. Glavnyy bukhgalter
toy-zhe kontory (for Kursevich).
(Salvage (Waste, etc,))

MUKHAMETSHIN, N. (Kazan')

Hidden potentialities in the economy of transport expenses.
Sov.torg. 35 no.7:13-16 J1 '62. (MIRA 15:11)
(Shipment of goods)

MUKHAMETSHIN, Sh.

At the sources of Devonian petroleum

Moskva Profizdat, 1952. 67 p.

Novatory sotsialisticheskogo proizvodstva (54-18347)

Tn870. M92

MUKHAMETSHIN, Sh.M.

Operation of submersible electric-driven pumps. Neftianik
1 no.4:14-18 Ap '56. (MLBA 9:10)

1. Nachal'nik tret'yego uchastka dobychi pervogo promysla
upravleniya Tuymazaneft'.
(Oil well pumps)

MURHAMJETSHIN Sh.M.

2141. Automation of oilfields
J. K. Kuznetsov
biggest fields in the world are
equipped with automatic
fields are automatically controlled
operating the pumps has been substantially improved.

GUMEROVA, M.Kh.; ARISTOVA, T.V.; GIL'MANOVA, R.G.; L'VOV, F.V.; BUKCHANTAYEVA,
M.S.; ~~MUKHAMETSHINA, M.A.~~; GAYNULLINA, N.M.; KHRAMOVA, N.P.;
KOBRAKOVA, I.N., red.; LABUDIN, N.T., red.; IEROGIMOVA, Z.A.,
tekhn.red.

[Forty years of the Tatar A.S.S.R.; statistical collection]
Tatarskaia ASSR za 40 let; statisticheskii sbornik. Kazan',
Tatarskoe knizhnoe izd-vo, 1960. 171 p. (MIRA 14:3)

1. Tatar A.S.S.R. Statisticheskoye upravleniye. 2. Nachal'nik
Statisticheskogo upravleniya Tatarskoy ASSR (for Kobranova).
(Tatar A.S.S.R.--Statistics)

CHIGARKIN, A.V.; TRIFONOVA, T.M.; SMIRNOVA, R.Ya.; KAZANSKAYA, Ye.A.; VILESOVA, L.A.; MUKHAMETZHANOV, S., kand. geologo-miner. nauk; GLADYSHEVA, Ye.N., kand. geogr. nauk; BAZARBAYEV, K.; KUZNETSOVA, Z.V.; ABDRAKHMANOV, S.; NAZARENKO, I.M., kand. geogr. nauk; YESAULENKO, P.I., kand. sel'khoz. nauk; LAVROVA, I.V., kand. ekonom. nauk; PAL'GOV, N.N., akademik, red.; CHEZGANOV, L., red.; NAGIBIN, P., tekhn. red.

[The Virgin Territory; brief studies on nature, population and economy]TSelinyi krai; kratkie ocherki o prirode, naselenii i khoziaistve. Alma-Ata, Kazakhskoe gos. izd-vo, 1962. 188 p.
(MIRA 15:9)

1. Otdel geografii Akademii nauk Kazakhskoy SSR (for all except Chezganov, Nagibin). 2. Akademiya nauk Kazakhskoy SSR (for Pal'gov).

(Virgin Territory—Economic geography)

SKVORTSOV, V.V.; MUKHAMEDZIANOV, F.M.

Determining the optimal production distribution in nonuniform strata.
Nauch.-tekhn. sbor. po dob. nefi no.24:26-34 '64. (MIRA 17:10)

1. Fiziko-tekhnicheskii institut Kazanskogo Filiala AN SSSR.

MUKHAMEDZIANOV, F.M.; SALEKHOV, G.S.; CHUGUNOV, V.D.

Using linear programming for solving certain problems of the
efficient petroleum production. Izv. vys. ucheb. zav.; neft'
i gas 3 no.9:73-80 '60. (MIRA 14:4)

1. Kazanskiy gosudarstvennyy pedagogicheskiy institut, Kazanskiy
filial AN SSSR.

(Oil field flooding)

CHUGUNOV, V.D.; SALEKHOV, V.G.; MUKHAMETZIANOV, F.M.

Maximum oil recovery from a field in the flow production period.
Izv. vys. ucheb. zav.; neft' i gaz 4 no.2:57-64 '61.

(MIRA 15:5)

1. Kasanskiy gosudarstvennyy pedagogicheskiy institut, Kasanskiy
filial AN SSSR.

(Oil fields—Production methods)

MUKHAMEDZIANOV, F.M. (Kazan')

Determining the function of pressure for a nonuniform elliptic
stratum. Izv. AN SSSR. Otd. tekhn. nauk. Mekh. i mashinostr. no. 5: 171-
173 S-O '61. (MIRA 14:9)

(Oil reservoir engineering)

MUKHAMETZYANOV, F.M. (Kazan')

Problem concerning unsteady percolation of a liquid. PMF
no.1:154-157 Ja-F '62. (MIRA 15:4)
(Soil percolation)

MUKHAMETZIANOV, F.M.

Distribution of injected water in a reservoir in elastic drive.
Izv. Kazan. fil. AN SSSR. Ser. fiz.-mat. i tekhn. nauk. no. 15:
44-53 '62.
(MIRA 17:7)

1. Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR.

MUKHAMETZIANOV, G.Kh.; TARZIMANOV, A.A.; USMANOV, A.G.

Experimental investigation of the heat conduction of
normal alcohols. Izv.vys.ucheb.zav.;neft' i gaz ~ no. 1:
73-75 '64. (MIRA 17:7)

1. Kazanskiy khimiko-tehnologicheskii institut imeni
S.M.Kirova.

L 25019-65 FSF(h)/EWT(1) IJP(c)

ACCESSION NR: AT5003210

S/3124/63/001/000/0047/0051

16
15
B+1

AUTHOR: Mukhametzyanov, I. A.

TITLE: Approximate estimate of the overall behavior of trajectories of perturbed motion of certain nonlinear systems

SOURCE: Moscow. Universitet druzhby narodov. Trudy, v. 1, 1963. Teoreticheskaya mekhanika (Theoretical mechanics), no. 1, 47-51

TOPIC TAGS: perturbed motion, perturbed motion trajectory, nonlinear system, nonlinear system perturbation, Chaplygin theorem

ABSTRACT: The estimate of the overall behavior of trajectories of perturbed motion of certain nonlinear systems has been carried out by studying the characteristics of the solution of linear differential equations. The study is based on the known Chaplygin theorem concerning differential inequalities (S. A. Chaplygin, Novyy metod priblizhennogo integrirvaniya differentsial'nykh uravneniy, GITTL, 1950). Let the differential equation of the perturbed motion be given in the form

$$y_n - f(t, y, y', y'', \dots, y^{(n-1)}) = 0, \quad (1)$$

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ACCESSION NR: AT5003210

where t is the independent coordinate, y the perturbed coordinate, $y', y'', \dots, y^{(n-1)}$ the derivatives of the perturbed coordinate with respect to t , and $f(t, 0, 0, \dots, 0) = 0$. Assume that one has found differential equations of the form

$$z_1^{(n)} - F_1(t, z_1, z_1', z_1'', \dots, z_1^{(n-1)}) = 0 \quad (2)$$

$$z_2^{(n)} - F_2(t, z_2, z_2', z_2'', \dots, z_2^{(n-1)}) = 0 \quad (3)$$

If now: 1) For $t \rightarrow \infty$, the arbitrary solution of Eqn. (2) tends to the function $b_1(t)$, while an arbitrary solution of Eqn. (3) tends to $b_2(t)$

where $b_1(t) > b_2(t)$, (3a)

2) Over the interval $t \in (0, \infty)$ the substitution of an arbitrary solution of Eqn. (1) for z_1 in (2) is less than zero, and for z_2 in (3) is more than zero, i.e.,

$$y^{(n)} - F_1(t, y, y', \dots, y^{(n-1)}) < 0 \quad (4)$$

$$y^{(n)} - F_2(t, y, y', \dots, y^{(n-1)}) > 0 \quad (5)$$

3) Over the interval $t \in (0, \infty)$ all solutions of Equations (1), (2), (3) and their derivatives up to order n are finite and continuous, and the functions F_1, F_2 , and their partial derivatives with respect to their arguments over that

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ACCESSION NR: AT5003210

interval t are finite; 4) For Equations (2) and (3) the Chaplygin theorem is applicable over the entire interval $t \in (0, \infty)$; then on the basis of that theorem one may state that an arbitrary solution of Eqn. (1) for $t \rightarrow \infty$ can be bounded by two functions $\varepsilon_1 + b_1(t)$ and $\varepsilon_2 + b_2(t)$ where ε_1 and ε_2 are arbitrarily small positive quantities. Orig. art. has: 20 formulas.

ASSOCIATION: Universitet druzhby narodov imeni Patrisa Lumumby, Moscow (Peoples friendship university)

SUBMITTED: 00

ENCL: 00

SUB CODE: ME, MA

NO REF SOV: 002

OTHER: 000

Card 3/3

L 25020-65 F6F(h)/EWT(1) IJP(c)

ACCESSION NR: AT5003211

S/3124/63/001/000/0052/0055

AUTHOR: Mukhametzyanov, I. A.

TITLE: The establishment of a set of differential equations describing stable motions according to a given program

SOURCE: ²⁾ Moscow. Universitet druzhby narodov. Trudy, v. 1, 1963. Teroreticheskaya mekhanika (Theoretical mechanics), no. 1, 52-55

TOPIC TAGS: stable motion, programmed motion, differential equations, motion equation

ABSTRACT: N. P. Yerugin previously described (PMM, 1952, vol. XVI, no. 6) the general structure of the totality of differential equations corresponding to a given integral curve. In the present article, the author establishes the set of systems of differential equations describing stable motion when 1) a trajectory is given; and 2) the law of variation of coordinates is given. Orig. art. has: 18 formulas.

ASSOCIATION: Universitet druzhby narodov imeni Patrisa Lumumby, Moscow (Peoples friendship university)

Card 1/2

L 25020-65

ACCESSION NR: AT5003211

SUBMITTED: 00

ENCL: 00

SUB CODE: ME,MA

NO REF SOV: 002

OTHER: 000

Card 2/2

L 11127-66 EWT(d)/EWT(1)/EWP(m)/ES(v)-3/EWA(d) IJP(c) GW
 ACC NR: AT5028801 SOURCE CODE: UR/3124/64/005/000/0010/0029
 44 55
 AUTHOR: Mukhametzhanov, I. A. 38
 44 55
 ORG: People's Friendship University, Moscow (Universitet drushby narodov) B+1
 16 44 55
 TITLE: Sufficient conditions for boundedness and stability of solutions of ordinary differential equations
 SOURCE: Moscow. Universitet drushby narodov. Trudy, v. 5, 1964. Teoreticheskaya mekhanika (Theoretical mechanics), no. 2, 10-29
 TOPIC TAGS: differential equation, stability
 ABSTRACT: The author treats a system of differential equations of the form

$$\dot{x}_s = \sum_{j=1}^n p_{sj}(t) x_j + X_{sj}^{(2)}(x_1, x_2, \dots, x_n, t) + \Phi_{sj}(x_1, x_2, \dots, x_n, t) + F_{sj}(t) \quad (1)$$

$$s = 1, 2, \dots, n,$$
 where $\dot{x}_s = \frac{dx_s}{dt}$; x_s are the system coordinates, $p_{sj}(t)$ are functions bounded and continuous in the time interval $[t_0, T]$; $X_{sj}^{(2)}$ are terms of the series expansion in powers of x_s higher than first order with continuous bounded coefficients, Φ_{sj} are functions characterizing constantly acting perturbations bounded in modulus and permitting conditions of existence and uniqueness of (1), and F_{sj} are given bounded
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L 11127-66

ACC NR: AT5028801

functions also having this latter property. The author gives estimates for solution of such equations and conditions determining the time interval under which such solutions exist. He applies his method to proofs of results of G. N. Duboshin (K voprosu ob ustoychivosti dvizheniya pri postoyanno deystvuyushchikh vozmushcheniyakh, Trudy Astronomicheskogo instituta im. Shterenberg, t. 14, 1940) and N. G. Chetayev (Ustoychivost' dvizheniya, GITTL, 1955). Orig. art. has: 65 formulas.

SUB CODE: 12/ SUBM DATE: none/ ORIG REF: 007

PC
Card 2/2

L 11129-66 EWT(d)/EWT(1)/EWP(m)/FS(v)-3/EEC(k)-2/EWA(d)/FCS(k)/EWA(c)/EWA(1)

ACC NR: AT5028803 GVI/BC

SOURCE CODE: UR/3124/64/005/000/0070/0082

AUTHOR: Mukhametzyanov, I. A.

ORG: People's Friendship University, Moscow (Universitet druzhby narodov)

TITLE: Problems of stability of motion in setting up a law for control for objects of programmed regulation

SOURCE: Moscow. Universitet druzhby narodov. Trudy, v. 3, 1964. Teoreticheskaya mekhanika (Theoretical mechanics), no. 2, 70-82

TOPIC TAGS: differential equation, stability

ABSTRACT: The author considers equations

$$\begin{aligned} \dot{x} &= G(x, y, z, \dot{y}, t) + q, \\ \dot{y} &= \Phi(x, y, z, \dot{y}, t) + f, \end{aligned} \quad (1)$$

of motion of an object of control where G and Φ are natural accelerations occurring for the given object, q and f are accelerations from the controlling force. A study is made of the problem of determining q and f so that (1) yields motion on the trajectory

$$y = \bar{y}(x) \quad (2)$$

and guaranteeing stability of this trajectory. Methods are presented for estimating the deviation from the given program as a result of error in defining the flowing

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L 11129-66

ACC NR: AT5028803

coordinates and their velocities, constantly acting perturbations bounded in modulus, and also parametric perturbations. Orig. art. has: 29 formulas.

SUB CODE: 12/ SUM DATE: none/ ORIG REF: 007

BC
Card 2/2

L 11126-66 EWT(1)/EWP(m)/FS(v)-3/EWA(d)/FCS(k)/EWA(1) GW
 ACC NR: AT5028809 44 55 SOURCE CODE: UR/3124/64/005/000/0161/0195

AUTHOR: Mukhametzhanov, I. A. 44 55 42

ORG: People's Friendship University, Moscow (Universitet druzhby narodov) 341

TITLE: On the stability of a guided body motion in a central field 45

SOURCE: Moscow. Universitet druzhby narodov. Trudy, v. 5, 1964. Teoreticheskaya mekhanika (Theoretical mechanics), no. 2, 161-195

TOPIC TAGS: stability criterion, particle trajectory, central force field, circular orbit, guided trajectory

ABSTRACT: The stability of the programmed motion of a solid body in a single attractive force field was studied. The governing equations for the trajectory of the body are given in polar coordinate 12,44

$$m(r - r \cdot \ddot{\theta}) = - \frac{\mu \cdot M_1 \cdot m}{r^2} + Z_r$$

$$m \cdot \frac{d(r^2 \cdot \dot{\theta})}{r \cdot dt} = H$$

The programmed motion is represented by $r = r_0(t)$, $\theta = \theta_0(t)$, and the necessary values of the control forces to allow the programming--by $Z = Z_0(t)$, $H = H_0(t)$. Small

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ACC NR: AT5028809

perturbations are applied to the above quantities, and, under the assumption that the body is guided by linear relations, the following set of perturbation equations is obtained

$$\begin{aligned} \dot{x}_1 &= x_2 \\ \dot{x}_2 &= x_4 \\ \dot{x}_3 &= a_{11} \cdot x_1 + a_{12} \cdot x_2 + a_{13} \cdot x_3 + a_{14} \cdot x_4 + r_0 x_3^2 + 2\dot{\theta}_0 \cdot x_1 \cdot x_4 + \\ &\quad + x_1 \cdot x_4^2 - \frac{k_2(2r_0 \cdot x_1 + x_3^2)}{r_0^2 \cdot (r_0 + x_1)^2} + Q_1 + F_1 \\ \dot{x}_4 &= a_{21} \cdot x_1 + a_{22} \cdot x_2 + a_{23} \cdot x_3 + a_{24} \cdot x_4 + \frac{2}{r_0} \cdot x_3 \cdot x_4 + \\ &\quad + \left[\frac{-2m\dot{\theta}_0\dot{\theta}_0 + H_0 + \Delta H}{m} - 2 \cdot (r_0 \cdot x_1 + \dot{\theta}_0 \cdot x_3 + x_3 \cdot x_4) \right] \times \\ &\quad \times \frac{-x_1}{r_0(r_0 + x_1)} + Q_2 + F_2. \end{aligned}$$

To evaluate these equations of motion, the various domains of existence of the quantities M and x_0 are investigated, where M is a positive number determined from

$$\begin{aligned} M > |r_0| \cdot |x_d|^2 + 2|\dot{\theta}_0| \cdot |x_d| \cdot |\bar{x}_d| + |\bar{x}_d| \cdot |x_d|^2 + \frac{k_2 \cdot (2r_0 \cdot |x_d| + |\bar{x}_d|^2)}{r_0^2 \cdot (r_0 - |\bar{x}_d|)^2} + \\ &\quad + |Q_1| + |F_1| + |a_{11}| \cdot |\bar{x}_d| + |a_{14}| \cdot |\bar{x}_d| \dots \end{aligned}$$

The case is also analyzed where guidance is nonlinear and is represented by the set

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L 11126-66
ACC NR: AT5028809

$$\left\{ \begin{aligned} \frac{\Delta Z}{\pi} &= U_1(\xi_1), \xi_1 = B_1 \Delta r + B_2 \Delta \theta + B_3 \Delta r + B_4 \Delta \theta + Q_1, \\ \frac{\Delta H}{\pi r_0} &= U_2(\xi_2), \xi_2 = A_1 \Delta r + A_2 \Delta \theta + A_3 \Delta r + A_4 \Delta \theta + Q_2, \\ \left(\frac{\partial U_1(\xi_1)}{\partial \xi_1} \right)_{\xi_1=0} &= \left(\frac{\partial U_2(\xi_2)}{\partial \xi_2} \right)_{\xi_2=0} = 0. \end{aligned} \right.$$

As a special example, M is assumed to be the mass of the earth and the following initial conditions are assumed: $r_0 = 6700$ km, $\dot{\theta}_0 = 1.15 \times 10^{-3}$ rad/sec, $\dot{r}_0 = 0$, and $\theta_0 = 0$. The various perturbation functions derived above (e.g.,

$$\begin{aligned} |x_1| &= |f_1(x_0, t) + M \cdot \psi_1(t)|, \\ f_1(x_0, t) &= x_0 \cdot \left(|R_{11}(t)| + \frac{|R_{12}(t)|}{a_2} + \frac{|R_{13}(t)|}{a_3} + \frac{|R_{14}(t)|}{a_4} \right) = x_0 \cdot R_1(t), \\ \psi_1(t) &= \int_0^t \left(|R_{13}(t)| + \frac{|R_{14}(t)|}{R_0} \right) \cdot dt \end{aligned}$$

are evaluated graphically, and the analysis is restricted to the case of a circular orbit with constant angular speeds. Finally, numerical results are obtained with variable magnitudes of $\dot{\theta}_0$ and r_0 in the presence of perturbations. Orig. art. has: 69 equations and 25 figures.

SUB CODE: 22/ SUBM DATE: none/ ORIG REF: 004

Card 3/3

L 10527-66 EMT(d)/ENP(v)/ENP(k)/ENP(h)/ENP(l)

ACC NR: AP6003466

SOURCE CODE: UR/0103/65/026/002/0350/0358

AUTHOR: Makhametysanov, I. A. (Moscow)

ORG: none

46
B

TITLE: Evaluation of maximal deviations of the coordinates of nonlinear perturbed automatic control systems

SOURCE: Avtomatika i telemekhanika, v. 26, no. 2, 1965, 350-358

TOPIC TAGS: automatic control system, automatic control theory, perturbation, motion equation, nonlinear control system, coordinate

ABSTRACT: In most cases, automatic control systems are subjected to constant perturbing actions. In many cases, these perturbances cannot be precisely described mathematically. Limitations are therefore simply placed on the modulus of these perturbances, or a class of functions is indicated which describes the action of the perturbances. Invariance conditions are placed on the solutions of the system to exclude the influence of the perturbances. However, any limitations placed on the operation of the system in the form of an equation cannot be ideally realized, since the parameters of the system can have various values, depending on the action of internal or external factors. This article describes a method of evaluation of the maximal deviations of coordinates of nonlinear automatic control systems when subjected to the influence of initial, constant-action and parametric perturbances.

Orig. art. has: 48 formulas. [JPRS]

SUB CODE: 12, 13 / SUBM DATE: 09Jun64 / ORIG REF: 003

Card 1/1 *beh*

UDC: 62-501.3

L 17954-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM
 ACCESSION NR: AP5002569 S/0079/64/034/007/2471/2472

AUTHOR: Pudovik, A. N.; Fayzullin, E. M.; Mukhametzhanova, E. Kh.

TITLE: Reactions of diglycid ether with dialkylphosphorus acid chlorides

SOURCE: Zhurnal obshchey khimii, v. 34, no. 7, 1964, 2471-2472

TOPIC TAGS: ether, phosphorus acid, chloride, ester, sulfur

Abstract: In the reaction of diglycid ether with chlorides of phosphorus acids, the oxide ring opens on the side of the primary carbon atom, forming beta-chloro-beta'-glycidylisopropylalkyl esters of phosphorous acid. Sulfur was added to one of the products -- beta-chloro-beta'-glycidylisopropyl-diethyl ester of phosphorous acid, producing the beta-chloro-beta'-glycidylisopropyl-diethyl ester of triphosphoric acid. In the reaction of diglycid ether with two moles of the chloride of diethylphosphorous acid, addition occurred at both oxide rings, forming tetraethyl-alpha, alpha'-dichloromethyldiethylene glycol diphosphate. Orig. art. has 2 formulae and 1 table.

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L 17980-65
ACCESSION NR: AP4047047

SUBMITTED: 23 Aug 63

ENCL: 00

SUB CODE: GC, MT

NO REF SOV: 000

OTHER: 000

Card 2/2

L 36324-66 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) AT/JD/JG

ACC NR: AP6015794

SOURCE CODE: UR/0048/66/030/005/0892/0895

AUTHOR: Mukhammadiyev, E. S.; Rakhimov, R. R.

65

ORG: none

21
TITLE: Secondary electron emission from the (111), (100), and (110) faces of a tungsten single crystal under argon ion bombardment /Report, Twelfth All-Union Conference on the Physical Bases of Cathode Electronics held in Leningrad 22-26 October 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 5, 1966, 892-895

TOPIC TAGS: tungsten, single crystal, secondary electron emission, ion bombardment, argon

ABSTRACT: The authors have measured the secondary electron emission coefficients of the (100), (110), and (111) faces of tungsten single crystals under bombardment with 0.6 to 9.0 keV singly and doubly charged argon ions. The ions were produced in a hot cathode electron impact source. The ion beam was freed from neutral atoms and, after passing through a 60° magnetic analyzer, it was incident normally onto the 0.6 x 6 x 10 mm target. Three targets, one cut parallel to each of the investigated faces, were so mounted in the chamber that the desired target could be brought into position with the aid of a magnet. Before the measurements the targets were subjected to prolonged heating above 2200° K. The residual gas pressure in the target chamber was about

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L 36324-66

ACC NR: AP6015794

3 x 10⁻⁷ mm Hg. In all cases (i.e., for both singly and doubly charged ions and all three crystal faces) the secondary emission coefficient γ increased linearly with the ion energy E. The slope $d\gamma/dE$ was independent of the ion charge but was different for the different crystal faces. γ was greater for doubly charged ions than for singly charged ones. In the kinetic emission range (E 1 keV) the secondary emission anisotropy was marked, γ being greatest for the (110) face and least for the (111) face. In the potential emission range the picture was less clear, and more precise low energy measurements are to be desired. The present data suggest, however, that the potential emission coefficient is greatest for the face with the lowest work function. The kinetic emission coefficients were found to be proportional (within 5 %) to the packing density of the corresponding faces. Orig. art. has: 3 figures and 1 table.

SUB CODE: 20/

SUBM DATE: 00/

ORIG REF: 002/

OTH REF: 002

Card 2/2

ZOBOV, Ye.V.; LYALIKOV, Yu.S.; MUKHAMMEDNAZAROVA, O.M.

Amperometric titration of aldehydes and ketones by 2,4-
dinitrophenylhydrazine. Izv. AN Turk. SSR no. 4:45-50 '59.
(MIRA 13:8)

1. Turkmenskiy nauchno-issledovatel'skiy universitet im. A.M.
Gor'kogo.

(Hydrazine)

(Conductometric analysis)

murhammedov, Kh. U.

2

USSR .

Industrial production of sodium carboxymethylcellulose.
 Kh. U. Murhammedov. *Doklady Akad. Nauk Uzbek. SSR*, No. 12, 1954, No. 20820. — A new and cheaper method for producing carboxymethylcellulose is outlined. Wood pulp is soaked in 18-20% NaOH. The alk. cellulose is pressed until its wt. is 2.7-2.8 times that of air-dry cellulose. It is then ground at 35-40° for 1.5 hrs. and to it is added a calcd. wt. of solid NaOH. The mass is then ground for another 1.5 hrs., cooled to 18-20°, and treated with cryst. ClCH_2COOH ; after 1 hr. the cooling is stopped. When the exothermic reaction has reached 60-80°, the mass is transferred to preheated drums in which the reaction is completed after 4-6 hrs. Carboxymethylcellulose is sol. in H_2O ; its ester no. is 80-88; ester contents are 30-32%; the viscosity of a 2% aq. soln. is 3-9 centipoises.
 M. Hosh

NA 238

MUKHAMMEDOV, Kh.U.

The use of "KMTS" at plants of the General Administration of
Synthetic Fibers and of the silk industry. Tekst.prom.15
no.10:59 0'55. (MLRA 8:12)

1. Glavnyy inzhener zavoda Glavnogo upravleniya iskusstvennogo
volokna

(Sizing (Textiles))

L 18956-63 EPR/EWP(j)/EPF(c)/EWT(m)/BDS/ES(s)-2 AFFTC/ASD/SSD Ps-4/
 Pc-4/Pr-4/Pt-4 RM/WW/MAY
 ACCESSION NR: AP3006542 S/0191/63/000/009/0052/0053

AUTHORS: Oster-Volkov, N. N.; Muhammedov, Kh. U.; Zhuravleva, V. V. 84

TITLE: Epoxy-furan resins and some of their properties

SOURCE: Plasticheskiye massy*, no. 9, 1963, 52-53

TOPIC TAGS: epoxy resin , acetone, benzene, epoxy-furan resin , fiberglass

ABSTRACT: New epoxy-furan resins, designated as 41-FAED were prepared by copolymerizing varying proportions of furfural-acetone monomer FA¹⁵ with epoxy resin ED-6. The resins are characterized by high temperature stability, high insolubility in acetone, benzene, caustic and orthophosphoric acids, and greater porosity and brittleness than epoxy-resins. The new resin was as good as epoxy for bonding aluminum; it was used in preparing fiberglass for which physical-mechanical data is tabulated. "M. M. Yel'tsova took part in the experimental part of the work." Orig. art. has: 2 tables.

102

Card

ACCESSION NR: AP4039952

8/0191/64/000/006/0060/0061

AUTHOR: Oster-Volkov, N. N.; Mukhammedov, Kh. U.; Khorol'skaya, I. N.

TITLE: Combining furfural-acetone monomer with phenol-formaldehyde resin

SOURCE: Plasticheskiye massy*, no. 6, 1964, 60-61

TOPIC TAGS: modified phenol formaldehyde resin, phenol formaldehyde containing resin, furfural acetone containing resin, curing, hexamethylenetetramine, resin stability, alkali resistance, dielectric property, molded resin, electrical insulation, mechanical strength

ABSTRACT: A polymer was obtained by combining a phenol-formaldehyde resin (FF-4) with a furfural-acetone monomer in a 1:1 ratio, and the product properties, especially dielectric properties and electrical resistance, were investigated. The mixing was carried out at 40-50C for 2 hours, then at 60C at 300-350 mm Hg for 2-1/2 hours. The product 41-FAFF-11 was obtained in 85-87% yield. The product can be cured with 50% hexamethylenetetramine on prolonged heating at 160-170C or with acid catalysts at room temperature in 100-120 hours. The cured resin is stable in dilute acids (except 20% HNO₃), in alkali, oil, benzene, gasoline,

Card 1/2

ACCESSION NR: AP4039952

kerosine, alcohol and water; it decomposed in concentrated H_2SO_4 and HNO_3 . The cured 41-FAFF-11 resin is significantly more alkali resistant than phenol-formaldehyde resin and has good dielectric properties. Molded compositions of 41-FAFF-11 were prepared with graphite, asbestos and glass fiber fillers (molding temperatures of 180-185, 210-220 and 180-200C and pressures of 600-700, 600-700 and 100-250 kgs/cm², respectively). These materials have higher strengths and better electrical insulating properties than phenol-formaldehyde compositions. "N. K. Petropol'skaya and E. Yu Mirzayev took part in the experimental part of the work." Orig. art. has: 2 tables, 2 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 003

OTHER: 000

Card 2/2

OSTER-VOLKOV, N.N.; MUKHAMMEDOV, Kh.U.; KHOROL'SKAYA, I.N.; Prinimali
uchastiye: PETROPOL'SKAYA, N.K.; MIRZAYEV, E.Yu.

Combining furfuroleacetone monomers and phenol-formaldehyde resins.
Plast.massy no.6:60-61 '64. (MIRA 18:4)

1. MUKHAMMEDOV, MUZAFAR
2. USSR (600)
4. Sports
7. Far in the South. Mol.kolkh. 19 no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

MUKHAMMEDZHAN, Kh. Kh.

Mukhammedzhan, H. H. On the theory of infinite groups with an ascending central series. *Dokl. Akad. Nauk SSSR* No. 65, 269-272 (1979). (Russian)

A "special" group is one in which (i) the minimal condition for subgroups holds, and (ii) every proper subgroup is different from its normaliser. S. Cerinkevicius [Math. [Mat. Sbornik] N.S. 17, 59 (1961) no. 144, 59-64, 1961, 411], has proved that a group with a finite upper central series has only finite factors. In the present note the author proves that nonspecial groups with this property do not exist. Theorem. If the p -group G has an ascending central series, and if all factors of its upper central series are finite, then G is a special group. The idea of the proof cannot be indicated briefly. [Misprint: p. 271, line 8 from top, instead of the second 3_0 read 3_1 .]

A. A. Hirsch (Newcastle-upon-Tyne).

Source: Mathematical Reviews,

Vol 10, No. 9

8 MAR 1980

MUKHAMMEDZHAN, Kh. Kh

Mukhammedzan, H. H. On groups with an ascending central series. Mat. Sbornik N.S. 28(70), 185-196 (1951). (Russian)

In this review, G is a group with [transfinite] ascending central series (a.c.s.) $\{Z_\alpha\}$, $0 \leq \alpha \leq \omega$, $Z_0 = 1$, $Z_\omega = G$; i.e. $Z_{\alpha+1}/Z_\alpha$ is the center of G/Z_α . Proofs of the following results are given. If H is a normal subgroup of G , such that $H \cap (Z_{\alpha+1} - Z_\alpha)$ is not empty, then $H \cap (Z_\alpha - Z_{\alpha-1})$ is not empty ($\alpha > 0$). In particular, $H \cap (Z_1 - Z_0)$ can never be empty. If moreover H is locally normal (every finite set of elements of H lies in a finite and normal subgroup of H) then $H \subset Z_\omega$; here ω is best possible. Let g ($g \in G$) be expressible as a product of n th powers for each natural number n . Then g is permutable with every element of finite order in Z_ω [cf. Chernikov, Rec. Math. [Mat. Sbornik] N.S. 18(60) 391-422 (1946); these Rev. 8, 311]. If all factors $Z_{\alpha+1}/Z_\alpha$ are finite, then G is special, i.e., G satisfies the descending chain condition (d.c.c.) for subgroups. More generally, if all factors $Z_{\alpha+1}/Z_\alpha$ satisfy d.c.c., then G/Z_1 has a.c.s., all factors of which are finite; in this case the length of the a.c.s. of G is not ω and is less than ω_2 . Conversely, a special group has a.c.s., all factors of which satisfy d.c.c. See the author's preliminary announcement [Doklady Akad. Nauk SSSR (N.S.) 65, 269-272 (1949); these Rev. 10, 590].

J. L. Brenner (Pullman, Wash.).

Source: Mathematical Reviews,

Vol

12

No.

0

MUKHAMMEDZHAN KH. KH.

Mukhammedzan, B. H. On groups possessing increasing invariant sequence. Mat. Sb. N.S. 39(41) (1956), 201-218. (Russian)

The first chapter of this paper contains among others proofs of the following results: The center of a finite p -extension of a locally finite p -group P satisfies m.c.s. (minimal condition for subgroups) if and only if the center of P satisfies m.c.s. If an abelian normal subgroup A of a periodic ZA-group G satisfies m.c. for normal subgroups of G , then A satisfies m.c.s.; if moreover A is maximal then G satisfies m.c.s. (This generalizes a result of Chernikov, Dokl. Akad. Nauk SSSR (N.S.) 72 (1950), 243-246; MR 12, 77.) If those factors with natural number indices of the a.c.s. (ascending central series) of a periodic ZA-group G satisfy m.c.s., then G satisfies m.c.s. and the length of the a.c.s. is a non-limit ordinal number $< \omega_1$. This sharpens a result of the author, Mat. Sb. N.S.

1-111

possessing an M_4 -series. For each M_4 -series C_4 of G , the subgroups $C_4 \cap C_1, C_4 \cap C_2, C_4 \cap C_3$ are maximal abelian normal subgroups of C_4 . Main results: A group is a solvable group with $m.c.s. 11$ and only if it possesses an M_4 -series whose factors

are maximal abelian normal subgroups of the first factors of any M_4 -series in the group G .

MUKHANOV, A.A.

Improving vibration oscillographs. Priberostroyeniye no.12:22-23
D '56. (MIRA 10:1)

(Oscillograph)

MUKHANOV, A.A., inzh.

Rubber coupling for connecting flexible cables. Bezop.
truda v prom. 4 no.9:30-31 8 '60. (MIRA 13:9)
(Cables)

MUKHANOV, A.A.

Device for the automatic feed of strip metal into press dies.
Kuz.-shtam.proizv. 3 no.7:26-29 JI '61. (MIRA 14:6)
(Steel-metalwork)

NUKHANOV, A. I.

NUKHANOV, A. I.: "A forensic-medical evaluation of hemorrhage in the pancreas." Kiev Order of Labor Red Banner Medical Institute imeni Academician A.A. Boromolets. Kiev, 1956. (Dissertation for the Degree, of Candidate in Medical Sciences).

Source: Knizhnaya letopis' No. 26 1956 Moscow

USSR/General Problems of Pathology - Tumors. Comparative
Oncology. Tumors of Man

U

Abs Jour : Ref Zhur Biol., No 5, 1959, 22962

Author : Mukhanov, A.I.

Inst : Vinnitskiy Medical Institute

Title : Chorloepithelioma of Uterus, Diagnosed as Ectopic
Pregnancy with Fatal Result.

Orig Pub : Sb. nauchn. statey. Vinnits, med. in-t, 1957, vyp. 3,
202-206

Abstract : No abstract.

Card 1/1

- 33 -

МУКХАНОВ, Б. В.

МУКХАНОВ, Б. В., кандидат биологических наук, учитель биологии; АБЕУЙЕВ,
Б. О.

Repetitive test lessons in zoology. Biol. v shkole no. 5:43-45 8-0
'57. (MLBA 10:9)

1. Srednyaya shkola No. 54, Alma-Ata (for Mukhanov). 2. Alma-Atinskiy
gosudarstvennyy pedagogicheskiy institut (for Abeyev).
(Alma-Ata--Zoology--Study and teaching)

MUKHANOV, F.

Poor quality of work is intolerable. Sel'. stroi. no. 12:19
D '62. (MIRA 16:1)

1. Instruktor tresta Orgsovkhoostroy.

(Volgograd Province—Building)

L 24671-66 EWT(m)/T WE

ACC NR: AP6015850

SOURCE CODE: UR/0318/65/000/001/0011/0014

AUTHOR: Mukhanov, F. V.ORG: Novokuybyshev Petroleum RefineryTITLE: Experience gained from the operation and remodeling of an assembly for purifying dry and wet gas of thermal cracking with a solution of ethanolamineSOURCE: Neftepererabotka i neftekhimiya, no. 1, 1965, 11-14

TOPIC TAGS: sulfuric acid, hydrogen sulfide, butane, alcohol, fractional distillation

ABSTRACT: In order to obtain additional source materials for the production of sulfuric acid, an assembly for removing hydrogen sulfide from dry and wet gas of thermal cracking with triethanolamine (because of a lack of monoethanolamine) was remodeled at the Novokuybyshev Refinery. Complete diagrams of the original and modified assembly are given, and the routes followed by the gases and triethanolamine are fully described. The performance characteristics of the remodeled assembly and the parts added to the original assembly are listed. The remodeling increased the resources of dry gas and of the propane-propylene fraction for supplying the synthetic alcohol plant with raw material. Furthermore, the corrosion of the plant's gas-fractionating units was reduced, as was the consumption of alkali in the purification involving the removal of sulfur compounds from the butane-butylene fraction. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 11, 07 / SUM DATE: none

Card 1/1 *pld*

UDC: 665.53.521.6.071.7

MUKHANOV, G.V.

Work practice in reducing the number of agricultural accidents.
Trudy Inst.klin. i eksp.khir. AN Kazakh.SSR 3:148-155 '57.

(MIRA 10:8)

1. Institut klinicheskoy i eksperimental'noy khirurgii Akademii
nauk Kazakhskoy SSR

(KASKELEN DISTRICT--AGRICULTURE--ACCIDENTS)

BRYAKIN, Yu.M.; BABASHEV, B.S.; MUKHANOVA, G.V.

Experience in the use of a potentiated local anesthetic. Trudy Inst.
klin. i eksp. khir. AN Kazakh. SSR 4:68-71 '58. (MIRA 12:4)

1. Institut klinicheskoy i eksperimental'noy khirurgii AN Kazakhskoy
SSR.

(LOCAL ANESTHESIA)

BALAKIN, Ye.D.; MUKHANOV, G.V.; MURVANIDZE, D.S., red.; KHRAMYKH,
N.M., red.; BRODSKIY, V.S., tekhn. red.

[Topics for inventors and efficiency promoters in the shoe
industry] Temnik dlia izobretatelei i ratsionalizatorov obuv-
noi promyshlennosti. Moskva, Biuro tekhn. informatsii leg-
koi promyshl., 1959. 95 p. (MIRA 15:11)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy nauchno-tekhnicheskii
komitet.

(Shoe manufacture--Technological innovations)

YEZERSKIY, Grigoriy Yevseyevich; MUKHANOV, Grigoriy Vasil'yevich;
RAZUMOVSKAYA, Ye.V., red.; BATYREVA, G.G., tekhn. red.

[Manufacture of light footwear and house slippers] Proiz-
vodstvo legkoi i kummatnoi obuvi. Moskva, Rostekhnizdat, 1962.
205 p. (MIRA 15:4)

(Shoe manufacture)

LEVENKO, Petr Ivanovich; KUDRYA, Sergey Denisovich; ~~MUKHANOV,~~
~~Grigoriy Vasil'yevich;~~ NOVIKOV, V.S., inzh., retsenzent;
KNAKHOVSKAYA, L.M., red.

[Specialization of the enterprises of the leather and
shoe industry] Spetsializatsiia predpriatii kozhevenno-
obuvnoi promyshlennosti. Moskva, Izd-vo "Legkaia in-
dustriia," 1964. 89 p. (MIRA 17:9)

MUKHANOV, I.I., kandidat tekhnicheskikh nauk.

Design of high-speed cast cutters for end mills. Trudy Ural.
politekh.inst. no.42:22-29 '55. (MLBA 9:8)
(Cutting tools)

69355

SOV/123-59-19-78497

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 19, p 94 (USSR)

18 5200 18.1120

AUTHOR: Mukhanov, I.I.

TITLE: On the Conditions for Efficient Use of Cast Tools¹⁴ From High-Speed Steel

PERIODICAL: Tr. Leningr. in-t aviats. priborostr., 1958, Nr 27, pp 25 - 36

ABSTRACT: Conditions were studied, under which the durability of cast tools (T) from high-speed steel exceed the durability of forged ones. The tests were carried out in machining carbon steel and alloyed steel with the aid of cast T (roughing tools and bits of facing cutters). By tests the optimum magnitude of the front and rear angles of tools and cutters were determined. Tests of forged and cast T with optimum angles showed the greater durability of the cast T. The durability of cast T was investigated in machining steel grades of various hardness, and tests were also carried out on dynamic face cutting. The results of the investigations showed: 1) the somewhat smaller ductility of cast T in comparison with forged ones affects the durability of the dynamic cutting process; 2) the

Card 1/2

X

30V/123-59-15-59517

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, p 91 (USSR)

AUTHOR: Mukhanov, I.I.

TITLE: On the Problem of Selecting a Hard Alloy and the Geometry for Cutting Tools for the Threading of Machine Parts of 2Kh13 Stainless Steel

PERIODICAL: Tr. Leningr in-^t aviats priborostr , 1958, Nr 27, pp 37 - 45

ABSTRACT The special problems connected with the machining of stainless steel are considered taking threading as an example. The formula for the calculation of the wear at the rear face of the cutting tool is given as a function of the volume of used up hard alloy. From the curves of the wear of the cutting tool in the course of time it follows that the best alloy for this kind of operation is the T15K6 alloy. 6 figures, 1 table, 6 references.

L.A.D

Card 1/1

MUKHANOV, I.I., inzh.; SAITOV, G.S., inzh.

Using the MIS-11 microscope in measuring the microroughness of
screw threads. Mashinostroitel' no.1:43-45 Ja '59.

(MIRA 12:2)

(Screw threads--Testing)

(Microscope)

I 10097-67
ACC NR: AR6020045

ENT(1)/ELE(c)/ENT(m)/EBC(k)-2/ENP(t)/EII/ENK/17
SOURCE CODE: UR/0276/66/000/001/BO41/BOW2

AUTHOR: Mukhanov, I. I.

TITLE: Possibility of using lasers for dimensional machining

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 1B277

REF SOURCE: Sb. dokl. k Novosib. nauchno-tekhn. konferentsii po mashinostr. Ch. 1.
Novosibirsk, 1964, 48-56

TOPIC TAGS: laser application, metal machining, ruby laser

ABSTRACT: The basic distinctive property of light radiated by lasers lies in the fact that all waves in the light beam are generated and propagated coherently (in phase). The energy from the laser may be concentrated in an area with a diameter of less than 0.01 cm for an energy density of greater than 100,000 kw/cm² with a pulse duration of 1 psec. A light beam of this type "burns through" hard and ultrahard materials in thousandths of a second. Machining by light beam is based on contact between the material to be finished and the powerful directed radiation from light pulses generated with transition of atoms in the "active" material of the laser from the excited state to the stationary state. A diagram is given showing operation of a ruby laser. The basic elements of the laser are the active material (ruby), source for excitation of its molecules (flash tube) and resonator (ruby rod). 2 illustrations. L. Tikhonova.
[Translation of abstract]

SUB CODE: 09, 13

UDC: 621.9.048.7

Card 1/1

ACC NR: AP6036887

(A)

SOURCE CODE: UR/0122/66/000/011/0052/0053

AUTHOR: Mukhanov, I. I. (Candidate of technical sciences); Golubev, Yu. M. (Engineer)

ORG: none

TITLE: Hardening of steel parts using a sphere vibrating at ultrasonic frequency

SOURCE: Vestnik mashinostroyeniya, no. 11, 1966, 52-53

TOPIC TAGS: metal hardening, ultrasonic frequency, wear resistance

ABSTRACT: The article gives experimental data on the effect of ultrasonic hardening on the wear resistance of steel subjected to oxidizing and pitting wear, and the changes in the mechanical strength of the steel under a static load. The samples were in the form of rings made of Type 45 steel with a diameter of 45 mm and bronze bushings with a contact surface of 100 mm². The rate of rotation of the rings was 3.26 meters/sec, and the pressure between the working surfaces of the sample had been cut, it was previously machined on a lathe. After the surface of the sample had been cut, it was subjected to the action of a sphere vibrating at ultrasonic frequencies (18-25 kilocycles). Before ultrasonic treatment, the height of the surface irregularities corresponded to the 5th class of purity. The roughness of the working surface of the rings after ultrasonic hardening was of the 9-10th class of purity, and of the bronze bushings of the 7th class. The data, shown in graphic form, shows that with an

UDC: 621.787.4-868.6

Card 1/2

ACC NR: AP6036887

increase in the static force above 5 kg, the depth of the hardening increases, but the surface microhardness decreases, leading to a decrease in wear resistance. Orig. art. has: 5 figures and 1 table.

SUB CODE: 11/ SUBM DATE: none

Card 2/2

STAVER, T.; MUKHANOV, I.

All-round and systematic help. Prof.-tekh. obr. 18 no. 3:25-26 Mr '61.
(MIRA 14:4)

1. Nachal'nik Permskogo oblastnogo upravleniya professional'no-tekhnicheskogo obrazovaniya (for Staver). 2. Nachal'nik upravleniya kadrov i uchebnykh zavedeniy Permskogo sovnarkhoza (for Mukhanov).
(Perm Province—Evening and continuation schools)

KUZ'MINA, M.D.; SVERCHKOVA, T.F.; GOLOVLEV, A.V.; MIKHANOV, K.I., kand.
ekon.nauk; CHERNYKH, V.M., otv.red.; SUSHKOVA, N., red.;
LUKASHEVICH, V., tekhn.red.

[Frontiers of the seven-year plan, 1959-1965] Rubeshi semiletki,
1959-1965. Saratov, Saratovskoe knizhnoe izd-vo, 1960. 168 p.
(MIRA 14:4)

(Russia--Economic policy)

MUKHANOV, K.K.

MUKHANOV, K. K., Docent

Cand. Tech. Sci.

Dissertation: "Practical methods for calculating the junctions of conical shells in the constructions of blast furnaces." 20 Jun 49

Moscow Order of the Labor Red Banner Engineering Construction Inst. imeni

V. V. Kuybyshev.

SO Vecheryaya Moskva
Sum 71

MUKHANOV, Konstantin Konstantinovich, kandidat tekhnicheskikh nauk; BALDIN, Y.A., kandidat tekhnicheskikh nauk, retsentsent; TUBIN, S.M., kandidat tekhnicheskikh nauk, nauchnyy redaktor; KOTIK, B.A., redaktor izdatel'stva; TOKER, A.M., tekhnicheskiiy redaktor

[The planning of steel structural elements] Proektirovanie stal'nykh konstruktsei. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 374 p. (MIRA 10:1)
(Steel, Structural)

MUKHANOY, K.K., kand. tekhn. nauk; VASIL'YEV, A.A., inzh.; SOKOLOV, B.B.,
inzh.; SYCHEV, V.I., inzh.

Effectiveness of using aluminum alloys in constructing walls and
roofs of industrial buildings. Prom. stroi. 37 no.7:37-40 J1 '59.
(MIRA 12:10)

(Aluminum alloys) (Metallurgical plants)

KIKIN, A.I., prof.; BELENYA, Ye.I., prof.; STRELETSKIY, N.S., prof.,
doktor tekhn. nauk; LESSIG, Ye.N., dots.; ~~LUKCHANOV, K.K.~~, dots.;
DUBINSKIY, G.S., dots.; SHESTAK, G.A., dots.; IGNAT'YEVA, V.S.,
dots.; KYBAKOV, V.M., dots.; GENTIYEV, A.N., prof.; VEDENIKOV,
G.S., dots.; TUBIN, S.M., kand. tekhn. nauk, nauchnyy red.;
BEGAK, B.A., red. izd-va; OSENKO, L.M., tekhn. red.

[Metal construction; present state and outlook for future
development] Metallicheskie konstruksii; sostoianie i pre-
spektivy razvitiia. Pod obshchei red. N.S.Streletskogo. Mo-
skva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materi-
alam, 1961. 333 p. (MIRA 15:4)

1. Moscow. Moskovskiy inzhenerno-stroitel'nyy institut.
2. Kafedra metallicheskih konstruksiy Moskovskogo inzhenerno-
stroitel'nogo instituta imeni V.V.Kuybysheva (for all except
Tubin, Begak, Osenko).

(Building, Iron and steel)

(Aluminum, Structural)

MUKHANOV, Konstantin Konstantinovich, kand. tekhn. nauk;
BALDIN, V.A., retsentsent; TUBIN, S.M., kand. tekhn. nauk,
nauchnyy red.; BEGAK, B.A., red.izd-va; ~~SH~~ERSTNEVA, N.V.,
tekhn. red.

[Metal structures; fundamentals of design] Metallicheskie
konstruktsii; osnovy proektirovaniia. Moskva, Gosstroi-
izdat, 1963. 404 p. (MIRA 16:7)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR (for Baldin).

(Building, Iron and steel)

MILLER, Viktor Yakovlevich, inzh.; KORCHAGIN, Vladimir
Aleksandrovich, inzh.; TOLOKONNIKOV, Vladimir Gerasimovich,
inzh.; MUKHANOV, K.K., kand. tekhn. nauk, retsenzent;
KUZNETSOV, V.V., inzh.; retsenzent; ZELYATROV, V.N., inzh.,
nauchn. red.

[Steel structures in a blast furnace - gas purification
complex] Stal'nye konstruktsii kompleksa domennoi pechi i
gazoочistki. Moskva, Stroiizdat, 1965. 278 p.
(MIRA 18:4)

STRELETSKIY, Nikolay Stanislavovich, doktor tekhn. nauk, prof.;
BULENYA, Yevgeniy Ivanovich, prof.; VEDENIKOV, Georgiy
Stanislavovich, dots.; ~~MUKHANOV, Konstantin Konstantinovich,~~
dots.; LESSIG, Yevgeniy Nikolayevich, dots.; POPOV, S.A.,
kand. tekhn. nauk, nauchn. red.; LILEYEV, A.F., inzh.,
nauchn. red.

[Metal elements; a special course] Metallicheskie kon-
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(Looms)**

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(MIRA 15:2)

(Bryansk Province--Looms)

KOL'TSOV, Stepan Kuz'mich; KAPUSTIN, Ivan Il'ich; MUKHANOV, P.Ya., re-
tsenzent; NEBOL'SIN, A.M., retsenzent; DUKHOVNIY, F.N., red.;
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The VP-300 water heater. Mashinostroenie no.3:105-106
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zyaystvennogo mashinostroyeniya, Khar'kov.
(Water heaters)

SOV/180-59-3-36/43

AUTHORS: Davydova, M.A., Kasatochkin, V.I., Mukhanova, L.N.
and Tayts, Ye.M. (Moscow)

TITLE: Mechanical Strength and Polymeric Structure of Thermally
Treated Coals

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh
nauk, Metallurgiya i toplivo, 1959, Nr 3, pp 171-175(USSR)

ABSTRACT: Changes in microhardness, resistance to crushing (in a
drum containing steel balls), interlattice order and
sizes of carbon layers of solid residues obtained on
thermal decomposition of various coals in the
temperature range 500 to 2340°C were studied. A regular
relationship between the course of changes in the
mechanical strength and molecular-structural
transformations, which take place in the residues on
the temperature at which coal was treated, was
established (Fig 1, 2, 3 and 4). The microhardness
depends on the total number of spatial bonds of the
polymeric substance of the solid carbonaceous residue.
The dependence of changes in the resistance to crushing
on the temperature at which coal was treated is related

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Mechanical Strength and Polymeric Structure of Thermally Treated
Coals

to the accumulation of internal stresses in the
substance of solid residues. There are 4 figures and
9 Soviet references.

SUBMITTED: October 13, 1958

Card 2/2

5.1230
15.2220

AUTHORS:

TITLE:

PERIODICAL:

83138
S/020/60/133/005/017/019
B016/B060
Zamoluyev, V. K., Mukhanova, L. N., Tayts, Ye. M.
Relationship Between Thermophysical and Mechanical
Properties of Highly Carbonized Polymeric Materials
Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 5,
pp. 1143-1145

TEXT: The authors of this paper discuss the relationship existing between specific thermal capacity, thermal diffusivity, heat conductivity, microhardness, as well as resistance to comminution of solid products. These products were obtained by thermal decomposition of fossil coals in the temperature range up to 2350°C, and can be regarded as highly carbonized polymers. At the same time, the authors established a functional relationship between variations in specific heat c_p and the magnitude of plane layers of carbon atoms. Nonsintering anthracites and Donets gas coal, whose variations in strength had been studied previously (Ref. 3), were examined. Proceeding from the experimental results

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obtained by the determination of the specific heat and of heat conductivity as well as of the weight by volume, the authors calculated the values of the coefficient of heat conductivity. Microhardness was determined by an apparatus of the type ПМТ-2 (PMT-2) devised by M. M. Khrushchev and Ye. S. Berkovich; the resistance to comminution was established with the aid of the BMG(VIMS) microdispersometer. The materials examined chiefly consisted of carbon; therefore, the variations in thermophysical and mechanical properties of highly carbonized polymers are, on the whole, related to their structural transformations. As can be seen from Figs. 1 and 2, there is a regular relationship between the specific heat and the expansion L of the plane layers of carbon atoms of highly carbonized polymers. With increasing L the number of carbon atoms deposited in single layers also rises. Consequently, the high-frequency oscillations of these atoms decrease in the range of Debye temperatures. An increase in the extension of plane layers of carbon atoms is the main cause of a drop in specific heat of highly carbonized polymers. Moreover, on a thermal decomposition of coals up to 1100°C , the chemical bonds

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between carbon atoms become closer. This is in agreement with results obtained and with a sudden rise in microhardness and heat conductivity when heating the initial coals up to 1100°C (Fig. 3). When the decomposition temperature rises beyond 1100-1300°C, processes of thermal destruction of the carbon side chains and a growth in the plane layers of carbon atoms take place until the stage of graphitization. The resistance to comminution of coals depends on two factors: material hardness and plasticity. Microhardness increases in the first heating stage (Fig. 3). The material also becomes more brittle. Hence, the resistance to comminution remains fairly constant, or even drops. The results obtained make it possible to evaluate the thermal stability of highly carbonized polymers, and can be used for the production of such materials with given thermomechanical properties. There are 3 figures and 3 Soviet references.

ASSOCIATION: Institut goryuchikh iskopayemykh Akademii nauk SSSR
(Institute of Mineral Fuels of the Academy of Sciences,
USSR)

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PRESENTED: March 23, 1960, by P. A. Rebinder, Academician

SUBMITTED: March 21, 1960

Card 4/4

IL'YASHENKO, Yu.; MUKHANOVA, N., red.

[Fruits of the land; sketches on the virgin lands]
Khleb-sol'; ocherki o tseline. Alma-Ata, Kazgoslit-
izdat, 1964. 320 p. (MIRA 18:5)

CA MUKHANOVA, V. L.

15

The influence of continuous fertilizer applications on the agrochemical properties of the gray semidesert soils
V. L. Mukhanova, *Pochvoedenie* (Pedology) 1949, 348
55. Data on two series of expts. of long years of continuous applications of manure and mineral fertilizer show soils in cotton with alfalfa in rotation, or continuous cotton with manure or mineral fertilizer can increase the org matter content as well as N and P, the increase being greater with manure. With fertilization, manure or mineral, the nitrification activity increases. The fertilized soils show an increase in total and available P.
1. S. 1046

MUKHANOVA, V.L.

USSR / Cultivated Plants. Plants for Technical Use. .
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34730

Author : Mukhanova, V.; Sultanov, A.

Inst : Not given

Title : Enriching of Cotton Plants with Organic Minerals.

Orig Pub : Khlopkovidstvo, 1957, No 5, 16-18

Abstract : No abstract given.

Card 1/1

USSR/Cultivated Plants - Potatoes. Vegetables. Melons. etc.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15649

Author : A.V. Alpat'yev, Yu.I. Mukhanova

Inst : -

Title : The Artificial Hybridization of the Kidney Bean.
(Iskusstvennaya gibrizatsiya fasoli).

Orig Pub : Vestn. s.-kh. nauki, 1957, No 6, 119-123.

Abstract : The results of two years studies made at the Gribovskaya Station are presented. Up to 50-100% of the hybrid plants were successfully obtained without the emasculation of the flowers. The F_1 from a cross between the Salharnaya Gribovskaya B-0802 and the Latviya B-800, Saksa Stringless 615 and the Early Maslyanaya varieties was notable for its rapid ripening and fine, full beans. Heterosis was clearly pronounced (in yielding capacity, the size of the beans and leaves, the intensity of growth), these features distinguishing it from hybrids stemming from

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